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ABSTRACT

The purpose of this document is to suggest an assessment/prescriptive/instructional (API) process for working with older learners experiencing reading difficulties. Following a justification for the designing of materials specifically for older learners, the document explains how to collect data about learner's interests, attitudes, and reading abilities and how to interpret test data. A sample personal data form and a list of criteria for measures analysis are provided. The document then indicates procedural steps for the API process for both learners and instructors. An appendix describes the following assessment measures found useful for the API process: the Reading Miscue Inventory; the Stanford Diagnostic Reading Test, Level III; the Carver-Darby Chunked Reading Test; Informal Assessment Invertories; and cloze techniques. The appendix also lists and annotates 22 publications helpful for students, provides a sample prescription for an older learner, explains useful study techniques, and shows how to use cloze and reciprocal questioning procedures as approaches to intruction. (GW)

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An Assessment-Prescriptive-Instructional Packet for Older Learners

Prepared for
Reading Clinic in
Language Communications

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An Assessment-Prescriptive-Instructional Packet for Older Learners

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Introduction

There seems to be a growing awareness of the need to recognize differences between younger learners and older learners. Obviously, physical appearances are notable differences, experiences of both are not as noticeable but should be apparent, and, emotional differences are varied thus causing variance in learning habits. Also, their reading habits are distinguishable. Older learners will require reading materials (assessment and instructional) that are comparable with their interest and/or experiences and emotional development. More specifically, materials for older learners should be considered in accord with their reading habits, needs and expectations.

Even though this packet may be adapted for usability with other level learners, its focus will be for those learners aspiring to "read most material written for the adult population. [These learners may]...be found in classes in community or junior college, university developmental reading and study skills centers..." (Biggs and Scales, 1978). Their objective is generally the same, to become an efficient reader.

Statement of Problem

The purpose of this project was to develop and describe an Assessment-Prescriptive-Instructional (API) packet for older learners experiencing reading difficulties. Specifically, the objectives were to: acknowledge differences between older and younger learners, delineate and describe an assessment-instructional process, and identify assessment and instructional materials.

Questions

The following questions necessitated the development of API.

1. How are older learners different from younger learners?
2. How is the learning environment for older learners different from younger learners? What characteristics, traits, tasks, etc. make them different?
3. Is there a need for an assessment-prescriptive-instructional packet of material for older learners who are experiencing difficulty with reading?
4. What are the elements of an assessment-prescriptive-instructional packet? Identify and describe.
5. What reading materials (assessment and instructional) are appropriate for an assessment-prescriptive-instructional packet?

Elements of API

Past practices have been to assess and instruct many older learners and younger learners with the same level material when it was assumed that their reading levels were about comparable. As sound as this approach may seem, it is an erroneous one. Older learners require materials written for older people. Furthermore, instructors of these older learners must respond to them as though they were older, i.e., allow them to take on some of the responsibilities for their learning, talk to them in a manner befitting an older person, demand that they follow through with prior commitments.

Older learners, unlike many younger learners are able to articulate many of their interests, needs and desires for wanting to read. "One significant characteristic is that adults are motivated learners" (Hall and Coley, 1975). Their experiences have presented life situations causing them to need to know how to read (Scales and Biggs, 1976). Adults can talk about their learning styles and reading habits which include reading strengths and needs. While talking about their reading habits, they may suggest or discover possible improvement strategies. Oral conversation then, is the beginning of the Assessment-Prescriptive-Instructional (API) packet. API flows from personal to formal, to informal data and on to interpretation of that data, then instruction. Specifically, API's personal data embodies: (1) reviews of

perceived interests, (2) reasons for wanting or needing to read. (3) reasons why the learner thinks that he does not read better, (4) materials read, or attempted out of necessity, (5) approximate percentages of words identified (see Item 4 above), (6) approximate percentages of materials read that were understood, (7) possible ways of improving reading ability, and (8) commitments in terms of time and responsibility that will be invested for reading improvement (see Figure 1).

RESPOND TO THE FOLLOWING ITEMS:

1. List your interests.
2. List your reasons for wanting to learn to read better.
3. List the reasons why you think you do not read better.
4. List your reading strengths, i.e., what helps you to know what words are, or how do you know what words are?
5. List the materials that you have attempted to read, within the past week, out of necessity or as recreation under the appropriate heading.

   Necessary Material Recreational Material

6. Approximately, what percentages of the words within the materials were you able to pronounce? _____.
7. Approximately, what percentages of the materials read did you understand? _____.
8. How do you think that you may go about improving your reading?
9. How much time per week will you commit yourself to improving your reading?

Figure 1 *Personal Data Form*

Secondly, formal data dealing with reading ability is collected and interpreted. Data of this nature is obtained with the aid of existant survey and/or purported diagnostic measures (tests) such as: Carver-Darby Chunk Reading Test, Stanford Diagnostic Reading Test, Level III, and Gates-MacGinitie Reading Test.

(Prior to collecting data with any commercial measure, one should take care to appropriately analyze the measure for its feasibility in the assessment process. Figure 2 presents appropriate criteria for analyzing measures to be used in the API packet.)

Informal data is as necessary as formal data. It should be compared and contrasted with the formal data. Several approaches should be employed in the collection of informal data. One approach is to elicit sociolinguistic and psycholinguistic data by employing miscue analysis (Biggs and Scales, 1978). Another approach is cloze. The cloze technique has been found to be an appropriate and resourceful tool for collecting informal data while incorporating introspection and retrospection (Biggs, 1977). Selected materials for the cloze technique may come from such materials as: classroom instructional materials, newspapers, magazines, reference materials, household technical reading materials, etc.

In addition to data collection API emphasizes appropriate interpretation and use of collected data. These data

NOTE: Respond to all of the following items. Your responses will present you with clearer views of the measures intent as well as allowing you to make a better decision about its usability with specific learners.

1. Present your rationale for reviewing the measure.
2. Name of Measure _____
3. Author(s) of Measure _____
4. Publisher of Measure _____
5. Publication Date _____
6. Number of Forms _____
7. Level or Range of Measure _____
8. Time Required to Administer _____
9. Type of Measure _____
10. Cite Reading Abilities Measured _____

_____

11. Comments about Norms
12. Comments about Reliability
13. Comments about Validity
14. Comments about Items
15. Comments from Reviewer(s) (e.g., cite reviewer(s), cite source and other helpful information)
16. List Strengths of Measure
17. List Weaknesses of Measure (e.g., construct, bias against learner)
18. In view of the above information, indicate how this measure will be used to support your assessment efforts.

Figure 2 *Criteria for Measures Analysis*

(Adapted from Cronbache, L. Essentials of Psychological Testing. NY: Harper & Row. 1970.)

interpretations are based primarily on instructor's knowledge of the reading process for older learners as well as the tests explanation of test scores. Usually, it is helpful to: (1) list the scores, and (2) write out the meaning for each score next to the score. Finally, interpreted data is used to suggest such instructional techniques as the ReQuest Procedure, OARWET, and Cloze.

Procedures for API

Procedural steps for API can be varied, however, there are some basic concerns and steps which must be adhered to as far as planning for learners and implementing those plans. API accepts Scales and Biggs (1977) key concerns for instructors. They are:

> ...(1) ongoing assessment of students' strengths, needs, and interests; (2) productive learning experiences that include instructor-student, small group, and whole class interaction; (3) appropriate methods, materials, and management strategies...; and (4) evaluation of the effectiveness of the... management system.

During the assessment process for older learners, instructors initially elicit from individual learners' their interests and personal reading habits by informally discussing as well as writing out the information on a Personal Data Form (Figure 1) and placing that information in the learners folder. Such information helps to guide instructors and learners to select appropriate assessment (see Figure 2 for criteria) and instructional materials as well as make some

determination about learning settings and experiences.

Second, appropriate assessment material is selected, then, administered to learners individually or in groups and later interpreted. Prescriptions based on the interpreted data are then designed (written out) and presented to learners individually for developmental reading purposes. Once prescriptions have been designed and presented to the learners, it may be determined that a particular learner could best function by working with the instructor alone for the first few sessions; afterwhich, he should be grouped with two other learners for particular learning experiences. This type of instruction should not be overlooked as some learners are not able to function in group settings immediately following the assessment session.

Third, notes from each session are maintained on a record keeping form (Scales and Biggs, 1977) by the learner and evaluated by the instructor. This form is kept in the folder along with the Personal Data Form and prescriptions designed to help the learner overcome weak areas in reading. Each session is a continuation of the assessment, prescriptive, instructional process. Note: Management of this process by the instructor is a key factor that should be worked through carefully if the maximum amount of learning is to take place. The following listed steps for instructor, and learner are intended as guidelines for managing instructional

sessions.

A. Steps for the instructor are:

1. Prepare the Personal Data Form (Figure 1).
2. Prepare the record keeping form (Scales and Biggs, 1977).
3. Select some commercial and non-commercial assessment measures (Appendix A).
4. Analyze all commercial measures with the aid of the criteria suggested in Figure 2.
5. Select some reading materials for older learners (Appendix B).
6. Obtain manila folders and other accessory tools for instructional settings.
7. Work through the Personal Data Form with learners.
8. Administer assessment measures.
9. Interpret data from assessment measures, e.g., write out the meaning of each score and apparent significance of observed behaviors.
10. From the collected data list the reading strengths and needs.
11. Devise a prescription for the learner (see Appendix C for an example).
12. Guide the learner through the prescription (see Appendix D for suggested instructional techniques).
13. Evaluate the effectiveness of the prescription as it relates to learner achievement.
14. Write new prescription for learner.

15. Henceforth, the procedure is ongoing, i.e., assess, prescribe, instruct, evaluate, and so on.

B. Steps for the learner are:

1. Discuss and/or write in responses to each item on the Personal Data Form.
2. Work through the selected measures according to instructor instructions.
3. Review with the instructor data from the measures and Personal Data Form.
4. Talk and identify with the instructor primary reading needs.
5. Take a developed prescription and work through it with the aid of the instructor.
6. Record progress made with the prescription on the record keeping form.
7. Submit prescription and completed work to instructor for evaluation.
8. Review notes recorded on the record form, then proceed to work through the next prescription. This process then becomes continuous through to satisfactory functioning.

APPENDIX

A. Assessment Measures
   1. Reading Miscue Inventory
   2. Stanford Diagnostic Reading Test
   3. Carver-Darby Chunked Reading Test
   4. Informal Assessment Inventories
   5. Cloze Technique

B. Student Materials

C. Sample Prescription

D. Instructional Techniques

A. Assessment Measures

Several informal and formal measures are available for use for older learners, among those found to be most useful for API are presented as follows:

1. Reading Miscue Inventory (RMI)

> ...the RMI examines the way in which both language processes and thought processes function in the reading act, ...It can aid [in]...determin[ing] the varying causes of a reader's miscues, can pinpoint specific and repetive problems, and can distinguish them from difficulties which are caused by the organization or content of the reading material (Goodman and Burke, 1970).

During the reading act miscues are made when the reader's response differs from the written material. It may be assumed within the RMI context that this type of deviation (miscue) was due partly to the reader's language and partly to the written material. For example, the reader probably read the way he read because his language structure helped him to predict the contents of the written material. This bit of information could guide an instructor into finding or devising learning experiences that would help the reader begin to recognize differences among language structures and subsequently deal with those differences. Although, this would probably not be possible if the instructor were unaware of the importance of miscues. Several kinds of miscues may become evident during the reading act, among those are:

substitutions, omissions,* dialect variations, language structure variations. An instructor, using the RMI could qualitatively analyze and evaluate miscues for indepth understanding of learners' reading behaviors. The evaluation might present the notion that the miscues were cued by the learner's language and thought which he brought to the reading material.

API includes miscue analysis as one of its major assessment endeavors.

*A caution. Even though substitutions and omissions are recognized as miscues; API users will want to remember that some so-called substitutions and omissions within words are language structure derived. For example, pronouncing the word park as pauk may not be a substitution but a language pattern variation. Also, pronouncing the word called as call may not be an omission at the end of the word but a language pattern variation. In a particular language pattern, pronouncing ed is not a part of the language pattern so it should not be counted as an omitted element; it was never there. Not being there is much different from being omitted.

2. Stanford Diagnostic Reading Test (SDRT), Level III.

This test views reading as consisting of four sets of subskills: comprehension, vocabulary, decoding, and rate (Karlsen, et. al., 1974). (Figure 2 should be used for analysis of this test). The items developed for these areas may be considered appropriate for many students and inappropriate for others. For those students identified as inappropriate or whose background does not match the content of the test; it may prove to be a better measure if the time period for taking the test was extended in order to accommodate their lack of familiarity with the content and their reading behavior. For instance, particular test items may have the learners reading about such mythological characters as Zeus and his brother Pluto and their endeavors to rule heaven and earth, and the underworld (land of the dead). A learner who is familiar with these characters would probably fair better or take less time to read and understand the content of the material than someone who is not familiar with the content. The learner who is unfamiliar with the content is likely to utilize more reading strategies than the other learner, in that he may have to formulate visual images or figure out word meanings from contextual clues. Even though it is realized that extending the time would invalidate parts of the test's scoring procedures, API users would probably have a better profile of learners reading abilities - and that is what is needed.

SDRT does not measure study-type reading, e.g., adjusting reading rate and thinking while reading. By allowing learners more time to read passages from SDRT, API users may be able to postulate that many learners thought to be poor in comprehension or scoring in the stanine 3 range can comprehend as well as learners in the stanine 7 range. So in lieu of presenting learners with exercises in, say literal comprehension, instructors may want to present particular study techniques to the learners. After several instructional study-technique sessions, another form of the SDRT may be administered to the learners.

3. Carver-Darby Chunked Reading Test (CDCRT)

The CDCRT was designed for use with mature language users, such as those persons designated as high school, college and adults. It is different from other tests in that it "indicates comprehension at the sentence or thought level, i.e., every sentence has at least one test item which indicates information stored or thoughts understood" (Carver and Darby, 1972). More specifically, sentences contain chunks of information. A chunk can include from one to five related words within a sentence.

Advantages of CDCRT for API are summarized as follows (Carver and Darby, 1972):

1. It purports to measure information gained from reading a single paragraph by an individual.
2. It tests comprehension at the sentence level.
3. It has validity of individual differences in reading comprehension.
4. It seems to be the only test which provides scores at the efficiency, accuracy, and rate levels in reading.

> The Efficiency score...incorporates both the student's accuracy of storing information or understanding thoughts, and his rate. That is, the total number of correctly identified chunks is influenced by the number of items attempted, as well as the accuracy with which the student identifies incorrect chunks. The Accuracy score is the percentage of the items attempted which the student answered correctly. The Rate score is the last item attempted (p. 4).

Although all three scores should be analyzed together to reflect reading weaknesses; the Efficiency score appears to be the most

important because it reflect those reading attributes which practitioners desire to improve. That is, for a student to be an efficient reader he must read at a rate that is not so fast that little is retained nor so slow that little information is stored relative to time spent (Carver and Darby, 1972).

API supports the use of the CDCRT with older mature language users as one of its purposes is to identify or assess meaning obtained from reading individual sentences as well as paragraphs. CDCRT seems to be the only valid measure available to accomplish this goal.

4. Informal Assessment Inventories (IAI)

These inventories are similar to the traditional Informal Reading Inventory (IRI) in that a learner's reading levels may be approximated and decoding skills may be checked. To approximate or establish reading levels of materials API suggests the application of at least two readability formulas to the material selected for reading. By approximating readability of materials, instructors may better select reading materials for learners. Materials for IAI may come from several sources, e.g., novels, newspapers, textbooks (biology, history, social studies etc.). The reason for this variety of materials is so that learners will have some sense of their reading behaviors with different types of materials. For example, they may find out that they read novels faster than a history textbook, or the newspaper faster than the social studies textbook. Hence they will want to begin thinking of their reading rates in terms of "very rapid," "rapid," "average," and "slow and careful" (Thomas and Robinson, 1972).

IAI does have an oral reading component and a silent reading component. The oral reading component may be used to check learners reading behaviors, e.g., memory of material via retelling, language usage during retelling, recoding. The silent reading component allows learners the private opportunity of interacting with written material during an

uninterrupted period of time and presenting understanding of the material through pre-determined criteria in a pre-determined manner. Pre-determined criteria may be questions to be answered and/or problems to be solved from the material. Pre-determined manner may be writing answers to questions, talking to someone about what was read, manipulating parts of an item to present a concept.

General likenesses and differences between the oral reading section of the IAI and the oral reading section of the IRI may be observed through the steps presented in Figure 3.

The silent reading parts of the IAI and the IRI are about the same as for the oral reading parts. Exceptions are noted in steps three and four. Instead of reading orally the learner will read silently for both IAI and IRI. While the IRI generally focuses on responding to questions and occasionally retelling; the IAI always makes use of responding to questions, retelling and an additional element - performing tasks to demonstrate understanding of material read.

As presented, parts of the IAI overlaps with the IRI and reaches into the RMI. Hence, a combining of some elements from existing techniques plus additional elements. Biggs (1977), through her research, supported the use of a combination of assessment techniques during the assessment session with learners in order to obtain an appropriate diagnostic profile. API encourages the combining of different assessment techniques to assess learners reading behaviors.

IAI (Oral Section)	IRI (Oral Section)
1. Materials are selected from <u>several</u> areas.	1. Materials are selected from <u>one</u> area.
2. Criteria for evaluation is determined, e.g., questions are devised, directions for presenting concepts are developed.	2. Questions are devised.
3. Learner reads orally and instructor codes miscues.	3. Learner reads orally and instructor codes errors.
4. Learner responds to criteria devised to elicit understanding of material read, e.g., retelling, manipulating items, drawing maps.	4. Learner responds to questions.
5. Instructor both quantitatively and qualitatively evaluates responses to criteria and estimates the manner in which the reading process functioned during the reading of the material.	5. Instructor marks questions right or wrong and determine an approximate reading level for learner.

Figure 3 *Oral Sections of IAI & IRI*

5. Cloze Technique

Cloze is a readability technique that may be used to establish readability of reading materials. Its construct is one of simple deletion of words within the text. Every 5th word, 8th word, or 10th word may be deleted from selected reading passages. The reader reads the passages and fills in the exact missing words in an uninterrupted setting. Next the instructor checks the responses and tabulates the results (Burmeister, 1974).

Biggs (1977) suggests that a more efficient way of using cloze is to utilize introspection and retrospection in the process. Introspection in cloze would require the reader to orally tell why a particular response was selected for a particular blank space at the time of selection, while retrospection would require the reader to talk about his responses upon completion of the entire passage. API supports the use of introspection and retrospection in the cloze technique as it does help to present a more sensitive way of determining how the learner may be using his experiences and knowledge along with the written text in order to gather meaning from the printed passages.

B. Student Materials

Continuously, materials for students are being published. Presently, there is a voluminous amount on the market. Instructors, then, should charge themselves with the responsibility of being selective enough to choose materials that are appropriate for their learners. Following are some materials that may be useful. This list is not intended to be complete but suggestive as to the types of materials that are available.

Adams, W. Royce and John Bigby. How to Read the Humanities. Illinois: Scott, Foresman and Company, 1969.
("This book...shows the college student how to make the necessary reading style adjustments. It introduces him to...four steps that are basic to good reading habits - Exploring; Checking the Vocabulary; Analyzing for Comprehension; Synthesizing for Understanding.")

Baldwin, Woodrow W., ed. Readings in Business. Providence: P.A.R. Incorporated, 1974.
("...designed to take that student who is well practiced in general readings and provide him with a reservoir of business readings..." There are comprehension questions and vocabulary exercises.)

Carman, Robert A. and W. Royce Adams, Jr. Study Skills: A Students Guide for Survival. NY: John Wiley & Sons, 1972.
(The purpose of this book is to provide assistance in learning the following basic academic skills: reading, writing, listening, remembering, note-taking, and test-taking. "The book can be used by an individual in self-study or as a text in a formal study skills course." College freshman or those wanting to succeed in college should find this book quite helpful.)

Carter, Homer L. and Dorothy J. McGinnis. Reading: A Key to Academic Success. Dubuque: Wm. C. Brown Company Publishers, 1970.
(This book describes a number of academic areas and provide directions on how to develop those areas. For example, students will find information on such areas as "Learning to Concentrate" and "Learning to Read Creatively." Following each section is a guided activity. The activity specifies the "Aim" of the activity, suggests the type of "Materials" to be used and the "Procedures" to be followed.)

Conlin, Mary L. Vocabulary Module. Boston: Houghton Mifflin, 1978.
(Contains different content-area readings of high interest to adults. It stresses two principles: "(1) the variability of word meanings and the importance, as a consequence, of determining the meaning of a word within its context and (2) the importance of transferring the skills taught to the different content areas.")

Diederich, Paul B. and Sydell T. Carlton. Vocabulary for College (series) (2nd. Ed.). NY: Harcourt Brace Jovanovich, Inc., 1973.
(This series is a set of drill exercises on words from different content areas. High school juniors and college freshmen were instrumental in helping to select these words. The purpose of the series is to enable students to read and understand more difficult books.)

Evans, Bergen. Chapters. Providence: Jamestown Publishers, 1973.
("...offers a literary approach to reading efficiency." The text includes chapters from fifteen different books of various literary types with comprehension questions and discussion guides.)

Gilbert, Doris W. Breaking the Reading Barrier. Englewood Cliffs: Prentice-Hall, Inc., 1959.
("This book is...designed for use where reading is taught-in reading classes and clinics, in special freshman groups and adult education centers, and in certain industrial and extension classes." It presents exercises in vocabulary building, sentence reading, paragraph reading and rapid reading.)

Hodges, Raymond W., et. al. College Word Study. Providence: P.A.R. Incorporated, 1974.
("The primary purpose of this book is to develop the writing vocabulary of the student." It presents lessons in vocabulary building through specialized vocabulary words. Words come from such areas as ecology, geography, computer, space, retailing and archaeology.)

"Materials for General Public"
Several novels, newspapers, magazines, reference and informational materials written for adults are appropriate for many reading activities.

McGraw-Hill Basic Skills System: Tools for Learning Success. NY: McGraw-Hill Book Co., 1970.
("...the...System is aimed at college-bound high school students, and junior college and college students who need to improve those skills necessary for academic success." There are diagnostic tests for six skill areas - study skills, reading, vocabulary, spelling, writing and mathematics. Instructional materials (tapes and student books) are packaged under such headings as: Study Skills; Problem Solving; Listening and Note-taking; Library and Reference Skills.)

Norman, Maxwell H. and Enid S. K. Norman. How to Read and Study for Success in College (2nd ed.). NY: Holt, Rinehart and Winston, 1976.
(This book has "incorporate[d] practical reading and study techniques not only for the recent high school graduate but also for the returning student and the veteran." It emphasizes organization of school life and stresses the basic skills needed for efficient reading.)

Pauk, Walter. A Skill at a Time (series), Providence: Jamestown Publishers, 1975.
(This "series consists of ten booklets, each concentrating on a different reading comprehension skill." The reading level start at approximately grade nine. Accompanying each passage in each booklet "is a single comprehension question designed to develop the one, specific skill of that booklet.")

Pauk, Walter. Six-Way Paragraphs. Providence: Jamestown Publishers, 1974.
("...contains 100 passages for developing the six essential categories of comprehension...The reading levels...range from grade 6 to grade 13.")

"Reading Comprehension," published by the new York Times.
(This packet of materials presents reading comprehension skills that can be developed and reinforced through the use of the New York Times. Instructions to the teachers as well as objectives and skills are presented.)

Sack, Allen, Jack Yourman. How to Develop a College Level Vocabulary. NY: College Skills Center, 1968.
(The aim of this book is to help students learn roots and prefixes and words that are formed from those prefixes. The authors note that "vocabulary work is necessarily time-consuming," so students should plan to spend an appropriate amount of time if they are to improve their vocabularies.)

Selections from the Black, 1974 (series); Voices from the Bottom, 1972 (series); and Topics for the Restless, 1974 (series). Providence: Jamestown Publishers.
(These series are different in content but span the same reading levels (6-12) and reading skills: comprehension, vocabulary, word meaning, phonics and study. The type of content is reflected in the title of each series.)

Shaw, Phillip B. and Agatha Townsend. College Reading Manual. NY: Thomas Y. Crowell Co., 1959.
("This manual is designed to afford training in the basic reading skills...[It] may be used both for improving general comprehension and for emphasizing particular comprehension skills.")

Stauffer, Hilda. "New Materials on the Market" Journal of Reading. 21, February 1978, 426-444.
(Stauffer presents a compilation of relatively new instructional materials. The materials were not evaluated by her, simply listed and catagorized according to title and publisher, type of material, reading difficulty, interest level and skills developed. The reading difficulty and interest levels range from kindergarten through adult).

The Kaleidoscope Readers. Reading: Addison-Wesley Publishing Co., 1974.
(This series is designed for students in grades 7-12 who are reading below grade level. "There are eight books in the series ranging from a reading difficulty level of second to ninth grade." Skill areas are: word attack, vocabulary, comprehension, and study skills.)

The Opportunity for Skillful Reading Series. Belmont: Wadsworth Publishing Co., Inc., 1972.
(This series is designed for students in college reading programs. It is appropriate for lab use as each book does deal with a different skill area and it is drill oriented.)

Troubleshooter I in the Classroom (series) and Troubleshooter II in the Classroom (series). Boston: Houghton Mifflin Co., 1975.
(Troubleshooter I helps students learn the basic language skills. They may begin with sounds of letters, then develop word attack skills, build vocabulary, analyze sentences and paragraphs, and finally practice langauge skills. Troubleshooter II helps the student to develop "a simple but effective strategy for structural analysis, further develops vocabulary..., and moves on to develop more effective comprehension of contextual materials.)

C. Sample prescription for one Learner

From the interpreted data, it was determined that this learner could benefit from exercises dealing specifically with language structure and meaning, vocabulary development, and constant recreational reading.

Language Structure and Meaning

1. Select a short selection (about two pages) from the most current New York Times Magazine. Tape record yourself reading the selection orally. Listen to the selection and underline your variations from the printed text.
2. Take the cloze exercise from your folder and work through it. Then discuss your completed exercise with the instructor.

Vocabulary Development

1. Take the structural analysis packet from your folder and work through Exercise I, Prefixes that are Negative. After completing this page, select a peer and tell him why your words are placed in the appropriate column.
2. Take the book Word Study by Smith, et. al. and work through "Lesson One: Prefixes." Discuss your paper with the Instructor.
3. Take the context clues packet from your folder and work through Exercise I. Plan to discuss your answers with the large group.

Recreational Reading

1. Continue to read your selected novel during the Uninterrupted Sustained Silent Reading (USSR) period.
2. Outside of class read the newspaper and/or your favorite magazine daily.

D. Study and Instructional Techniques

Study Techniques are many and varied. Five similar higher level ones are SQ3R (Robinson, 1961), OARWET (Norman and Norman, 1976), PQ4R (Manzo, 1969), PQRST (West, 1974) and SQRQCQ. While OARWET and SQ3R tends to be suited for overall prose textbook type material, PQ4R is for informational chapters in various content area textbooks, PQRST is for science content and SQRQCQ is more suited for math content.

Since similarity among the techniques are great, a brief description of three of the techniques will follow.

OARWET and SQ3R are two organized techniques used by learners to study various reading materials, e.g., textbooks, chapters in books, pamphlets, etc. These techniques include six and five steps respectively. Each of the six letters in OARWET stands for one of the steps in this study technique. "O" directs learners to Overview the reading material, i.e., read the chapter title(s), read the chapter's subheadings, read the first two paragraphs of the chapter and then, read the last two paragraphs. "A" directs learners to Ask themselves questions about the chapter. If the chapter does not include questions, learners must generate their own questions from the subheadings. "R" directs learners to Read the chapter with the overview and generated questions in mind. "W" directs learners to Write notes as they read.

"E" directs learners to Evaluate the chapter read or determine the worth of the information presented therein. "T" directs learners to Test their knowledge and understanding of the chapters read.

SQ3R is similar to OARWET in that it directs learners to Survey, Question, Read, Recite, and Review their reading material. The first step is to conduct a survey or an overview of the chapter; second, generate questions about the chapter; third, read the chapter with questions in mind; fourth, recite or write out answers to the questions and other knowledge gained from reading; and fifth, review the chapter to make certain that the chapter has been understood.

Another package of study techniques is the PQ4R. PQ4R is a variation of SQ3R. It

> is applicable to the reading of informational chapters in science, health, history, civics, ...geography, sociology, economics, philosophy, journalism,...music appreciation,...art appreciation, art history and other courses - and in English when the chapters are expository (Thomas and Robinson, 1972).

The PQ4R steps requires readers to Preview, Question, Read, Reflect, Recite and Review. The process is very similar to OARWET and SQ3R.

A note. PQRST stands for Preview, Question, Read, Summarize, Test. SQRQCQ stands for Survey, Question, ReRead, Question, Compute, Question.

In addition to the five techniques noted above, API

encourages the use of cloze and Reciprocal Questioning (ReQuest) procedures. These procedures do force learners to deal with different language structures or basic linguistic elements as they essay to obtain meaning from the printed page. One key to obtaining meaning for learners appear to be embodied in their ability to interact with and/or understand the langauge structure of written material. Cloze and ReQuest forces a type of interaction between reader and written text that would probably not be found in uninterrupted reading. As readers use these procedures they try harder to comprehend or make sense out of the text. These procedures enhances the make sense attempt. Following is a brief description of each procedure.

Cloze is a procedure whereby words are deleted from a written passage and the reader reads and fills in the missing words by using clues from the remaining context. Usually every 5th, 8th or 10th word is deleted from the passage to be read. Occasionally, words are deleted depending on purpose for reading. For example, if a learner constantly has difficulty with particular concepts in a certain content area, passages with key words for those concepts may be deleted. The learner will read the passage and fill in the exact word or a synonym for the missing word. Discussion of the passage with the instructor is the next step. Here the learner explains why he choose particular words for the missing words in the passage. This discussion serves as an

aid for further understanding and clarifying of the passage as well as vocabulary development.

The ReQuest procedure like cloze forces the learner and instructor to pay close attention to context clues. This procedure initially offers equal participation in reading the same passages to learners and instructors. Specifically, this procedure shows learners how to critically think and formulate questions. First the learner and instructor take copies of the passage to be read. Second, they both read the first sentence of the passage silently. The learner is told to ask the instructor questions about the sentence - try to ask questions that the instructor might ask. Third, the instructor answers the questions, rephrasing questions when necessary. Fourth, learner and instructor reads second sentence. This time the instructor asks the learner appropriate questions about the sentence and further require him to integrate thoughts from the first and second sentences. This procedure continues until the learner can read the first paragraph, demonstrate literal understanding, and formulate a purpose for completing the remainder of the passage. Throughout the interaction learners should be encouraged to ask appropriate questions - so, the instructor as a model is crucial to this procedure (Schell, 1972).

Supplemental to knowing how to study is knowing how to read. Should the learner read everything very fast, very slow or average? If efficient readers are to be developed,

it will be necessary to inform them of the need to become flexible, i.e., adjust their reading rate to the task at hand. Thomas and Robinson (1972) suggests the following four approaches for reading rates: (1) Very Rapid -- about 400-600 wpm is for light, easy, fast moving fiction; (2) Rapid -- about 350-400 wpm is for fairly easy materials; (3) Average -- about 250-350 wpm is for such materials as magazine articles, travel books, chapters in social studies texts and novels; (4) Slow and Careful -- about 50-250 wpm is for reading materials with difficult concepts and vocabulary, for thorough reading of technical materials, and for reading to retain every detail.

API accepts the flexibility notion and encourages instructors to guide learners to identify their purpose for reading selected material, note the difficulty of the material and their familiarity with the concepts it presents, then decide which approach will be appropriate for reading the material. Use that approach. A caution. Reading rates may change while reading certain materials, e.g., chapters, paragraphs, etc. This is appropriate when the learner remembers his purpose for reading. Again, reading rates must be adjusted to fit the reading task at hand.

To summarize, several study techniques and approaches to instruction as well as notes on reading rates have been presented for the users consideration. This in no way attempts to eliminate other approaches to instruction that

may be helpful to learners in clinical settings. In fact API welcomes the inclusion of such techniques as Herber's (1970) "structured overview" model, Hafner (1977) and Burmeister's (1974) approaches or guides to studying particular types of materials as well as the many other suggestions found in professional (e.g., IRA Journals, NCTE Journals), and non-professional (e.g., New York Times, non-print media) materials.

References

Biggs, Shirley A. "Clinical Diagnosis of Comprehension Strategies: A Case Study." (Ed.D. dissertation, University of Pittsburgh, 1977).

Biggs, Shirley A. and Alice M. Scales. "Using Psycholinguistic Data to Develop Reading Competence in Adult Learners" ERIC/NCTE, 1978, [ED 142 982]

Burmeister, Lou E. Reading Strategies for Secondary School Teachers. Reading, Mass.: Addison-Wesley, 1974.

Carver, Ronald P. and Charles A. Darby, Jr. Manual for the Carver-Darby Chunked Reading Test. Silver Spring: Revrac Publications, 1972.

Francis P. Robinson. Effective Study. NY: Harper & Row Publishers, 1961.

Goodman, Yetta M. and Carolyn L. Burke. Reading Miscue Inventory Manual. New York: Macmillan Publishing Co., Inc., 1972.

Hafner, Lawrence E. Developmental Reading in Middle and Secondary Schools: Foundations, Strategies and Skills for Teaching. NY: Macmillan Publishing Co., 1977.

Hall, MaryAnne and Joan D. Coley. "Needs in Reading Instruction in Adult Basic Education." Adult Leadership. Vol. 24, November 1975, 104.

Herber, Harold L. Teaching Reading in Content Areas. Englewood Cliffs: Prentice-Hall, Inc., 1970.

Karlsen, Richard, et. al. Stanford Diagnostic Reading Test. New York: Harcourt Brace Jovanovich, Inc., 1974.

Manzo, Anthony. "The ReQuest Procedure," Journal of Reading, Vol. 13, November 1969, 123-126.

Norman, Maxwell H. and Enid S. Kass Norman. How to Read and Study for Success in College (2nd ed.), New York: Holt, Rinehart and Winston, 1976.

Scales, Alice M. and Shirley A. Biggs. "College Reading and Study Skills: An Assessment-Prescriptive Model." in Classroom Practices in Teaching English 1977-1978: Teaching the Basics. Ouida Clapp, ed. Urbana: NCTE, 1977.

Scales, Alice M. and Shirley A. Biggs. "Reading for Illiterate and Semi-Literate Adults: An Assessment-Prescriptive Instructional Model." ERIC/NCTE, 1976, [ED 126 500].

Schell, Leo M. "Some Promising Possibilities for Improving Reading Comprehension." in Schell, Leo M. and Burns, Paul C. Remedial Reading: Classroom and Clinic, (2nd Ed.), Boston: Allyn and Bacon, 1972, 430-442.

Thomas, Ellen L. and H. Alan Robinson. Improving Reading in Every Class. Boston: Allyn and Bacon, Inc., 1972, 70.

West, Gail B. Teaching Reading Skills in Content Areas. Orlando: Sandpiper Press, Inc., 1974, 148.